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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,615	09/30/2003	Terry L. Schneider	7784-553/CPA	4204
65961 7590 05/30/2007 HARNESS DICKEY & PIERCE, PLC P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			EXAMINER DYE, RENA	
			ART UNIT 1774	PAPER NUMBER
			MAIL DATE 05/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/674,615

Applicant(s)

SCHNEIDER, TERRY L.

Examiner

Merrick Dixon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on RCEt filed 9-24-04.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-16 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-16 and 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date see office action.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

  
MERRICK DIXON  
PRIMARY EXAMINER

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The instant application includes two(2) initialed and signed PTO-1449.

PTO-1449 having date of 2-9-04

PTO-1449 having date of 9-24-04.

16

The abstract of the disclosure is objected to because it contains the legal word, "comprise". Correction is required. See MPEP § 608.01(b).

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It is noted that claims 14 and 2 are identical. Applicants are requested to make appropriate corrections.

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A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467,

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114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

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Claims 1-6 and 9-12, and 14 provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-6 and 9-12 of copending Application No. 10/287561. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

20

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21

1. Claims 19-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Hohman(US 5,871,604).

The cited reference teaches the claimed process comprising providing first and second fiber layers , placing a layer of a resin matrix with particles therein between the layers and heating the resulting laminate to form a composite structure- col 2, lines 34-45; col 8, lines 66- col 9, line 56. Concerning claims 20-23, the claimed type of particles used in

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the resin matrix, the particles' shapes and dimensions, are directed to article limitations and are of no patentable consequences to the instant question for patentability which must be manipulatively distinct. *Ex parte Pfeiffer*, 1962 C.D. 408(1961).

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hohman(US 5,871,604) in view of Hagood IV et al(US 6,048,622).

The primary reference to Hohman teaches the basic claimed invention including a process for making a composite structure including the the manipulative steps of providing first and second fiber layers and placing a layer of resin matrix , with particles dispensed therein, between the layers and heating the resulting laminate to produce a composite structure- col 2, lines 34-45; col 8, lines 66- col 9, line 56. The cited primary reference while teaches including particles in its patented resin material , fails to expressly teach SMA particles. The secondary reference to Hagood IV et al, however teaches that it is known in the instant art to utilize SMC particles in resin matrix when

forming similar types composite material such as the primary reference – col 12, lines 13-29. It would have been obvious to one of ordinary skill in the art at the time the invention is made to combine the teachings of the secondary reference and include SMC particles in Hohman's resin, in an attempt to make composite of desired properties/characteristics, see above and see primary reference, col 8, lines 62-65. This combination would have been further obvious in the absence of unexpected results. Concerning claims 15-16, the secondary reference in col 12, lines 5-29 teaches that the SMA particles would be necessarily deformed. It is submitted that the resulting diameters and shape of the particles would also be manipulated as same is deformed in the absence of unexpected results. Concerning claims 17 and 18, the secondary reference also teaches heating and curing the composite with the particles therein- see col 11, lines 30-45, it is accordingly submitted that the particles would experience phase changes during such operation. Additionally, it is submitted that the claimed diameters would have been readily obtained by the skilled artisan, if not disclosed, as such optimum value of a result effective variable, as diameters, involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

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Applicants who wish to send a facsimile (draft copies) for the examiner's immediate review can do so by using the Examiner's personal fax number at 571-273-1520. The

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faxing of all papers must conform with the notice published in the Official Gazette, 1096 O.G. 30 ( November 15, 1989). **NOTE: All facsimiles sent to the examiner's personal fax number should be in draft-forms and will be treated as informal.**

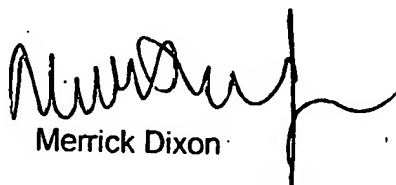
**Same facsimiles will not be entered** in the related applications unless otherwise agreed and noted by the examiner.

**The fax number for all other fascimile is 703-872-9306.**

Information about **the status of an application** may be obtained from the Patent Information Retrieval system (**Private PAIR**).

Status inquires for **published applications** may be retrieved from either **Private PAIR** or **Public PAIR**. Questions about the PAIR system should be directed to the Electronic Business Center at **866-217-9197**.

Any questions concerning the instant communication should be directed to Examiner Dixon, at 571-272-1520, Mondays to Thursdays, between 12 noon and 8 PM, eastern time . The examiner's supervisor, Mrs. Rena Dye, can be reached at 571-272-3186.



Merrick Dixon

Primary Examiner

Group 1700